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09/331,729	08/26/1999	FRANK OSAN	514425-3732	2014

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FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER
DOTE, JANIS L

ART UNIT	PAPER NUMBER
1753	15

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS-15

Office Action Summary	Application No. 09/331,729	Applicant(s) OSAN et al.
	Examiner J. DOTE	Group Art Unit 1753

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☐ Responsive to communication(s) filed on 2/22/02.

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 16-34 is/are pending in the application.

Of the above claim(s) 20 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 16-19, 21-34 is/are rejected.

☒ Claim(s) 20 is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other _____

Office Action Summary

Part of Paper No. 11

1. The request filed on Feb. 22, 2002, for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/331,729 is acceptable and a CPA has been established. An action on the CPA follows.

2. The examiner acknowledges the cancellation of claims 1-15 and the addition of claims 16-34 filed in Paper No. 11 on Aug. 24, 2001, which was entered as requested by applicants in the CPA. Claims 16-34 are pending.

The amendment to the specification at page 3, line 1, has not been entered because it is not in compliance with 37 CFR 1.121(b)(1).

3. The objection regarding the capitalization of trademarks set forth in the Office action mailed Feb. 21, 2001, Paper No. 9, paragraph 5, has been withdrawn in response to the amendments to the specification at pages 8, 16, and 17, filed in Paper No. 11.

The objection to the specification set forth in Paper No. 9, paragraph 6, has been withdrawn in response to the amendment to the specification at page 1, line 1, filed in Paper No. 11.

The rejections of claims under 35 U.S.C. 112, second paragraph, set forth in Paper No. 9, paragraph 9, have been mooted by the cancellation of claims 1, 4, 7, 13, and 14.

The rejections of claims under 35 U.S.C. 112, first paragraph, set forth in Paper No. 9, paragraph 11, have been mooted by the cancellation of claims 7 and 15.

The objections to the claims set forth in Paper No. 9, paragraph 12, have been mooted by the cancellation of claims 1, 7, and 9.

The rejections of claims 1-9, 12, and 15 under 35 U.S.C. 102(a) over WO 97/05529 (WO'529) as further evidenced by CAPLUS abstract AN 1994:459376 of JP 06032917, and of claims 10 and 11 under 35 U.S.C. 103(a) over WO'529 combined with US 5,707,772 (Akimoto), set forth in Paper No. 9, paragraphs 14 and 16, respectively, have been withdrawn in response to the cancellation of claims 1-12 and 15, and the addition of claims 16 and 29, which now require that the second resin, which has a Mn of 7,500 or more, have a glass transition temperature Tg lower than 70°C. WO'529 does not disclose a binder resin comprising said second resin.

The rejection of claim 14 under 35 U.S.C. 103(a) as being unpatentable over US 4,923,778 (Blair), as further evidenced by US 5,019,477 (Felder), set forth in Paper No. 9, paragraph 18, has been withdrawn in response to the cancellation of claim 14 and the addition of claim 34, which requires that the binder resin comprise a "polyolefin resin having a cyclic structure." Blair does not teach such a binder resin.

The rejection of claim 13 under 35 U.S.C. 103(a) over US 5,843,613 (Fujiwara), as further evidenced by ACS File Registry No. RN 64365-06-6, combined with Felder and US 4,659,640 (Santilli), set forth in Paper No. 9, paragraph 19, has been withdrawn in response to the cancellation of claim 13 and the addition of claim 33, which requires that the binder resin comprise a "polyolefin resin having a cyclic structure." None of the cited prior art teaches such a binder resin.

4. The amendment filed in Paper No. 7 on Dec. 12, 2000, is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

(1) The amendment at page 13, line 1, including "cyano groups" as a polar functional group, does not have adequate written support in the originally filed specification. The originally specification at page 12, lines 5-13, and page 13, lines 1-2, discloses that the polyolefin having a cyclic structure can have a carboxyl, hydroxyl, or amino group. Originally filed claim 3 recites that a polyolefin resin having a cyclic structure has "at least one polar functional group." The originally filed specification does not disclose that the polar

functional group includes "cyano groups." Applicants have not indicated where in the specification "cyano groups" are disclosed.

(2) The specification at page 31, line 8, has been amended to read, "one of the methods for introducing this crosslinked structure is to add a diene monomer, such as norbornadiene or cyclohexadiene, together with ester, amide, sulfide, ether, or acyclic olefin and the cycloolefin, followed by reacting the system, thereby obtaining a terpolymeric polyolefin having a cyclic structure" (emphasis added). The reaction of a diene monomer with ester, amide, sulfide, or ether, and cycloolefin monomer, as now disclosed in the specification, does not have adequate written support in the originally filed specification. The originally filed specification at page 31, lines 3-10, discloses that a crosslinked structure may be introduced into the polyolefin resin having a cyclic structure by reacting a diene monomer, such as norbornadiene or cyclohexadiene, together with an acyclic olefin monomer and a cycloolefin monomer to form a terpolymer (i.e., a terpolymer obtained from the diene, acyclic olefin, and cycloolefin monomers). Originally filed claim 7 recites that a polyolefin having a cyclic structure has a structure "crosslinked by a diene, ester, amide, sulfide or ether." The originally filed specification at page 13, lines 10-32, discloses that a polyolefin having a cyclic

structure can be crosslinked by the addition of a crosslinking agent, oxidation, or epoxidation. The specification further discloses that a polyolefin having a cyclic structure which has a carboxyl group can be crosslinked by the addition of a metal. Thus, there is no written description in the originally filed specification for the reaction product of a diene monomer with an ester, amide, sulfide, or ether to obtain a terpolymeric polyolefin having a cyclic structure with a crosslinked structure, now disclosed at page 13 of the specification.

Applicants are required to cancel the new matter in the reply to this Office action.

Applicants' arguments filed in Paper No. 11 have been fully considered but they are not persuasive.

(1) Applicants assert that the specification has been amend to delete the disclosure of cyano groups. However, for the reasons set forth in paragraph 2, supra, the amendment to the specification at page 13 has not been entered.

(2) Applicants did not address the objection set forth in item (2), supra.

Accordingly, for the reasons given above, the objections stand.

5. The disclosure is objected to because of the following informalities:

1) The specification discloses liquid toners and "liquid dried" systems that comprise an electrolytic solution. See Toner preparation methods 4 and 5 at page 17. However, the specification identifies ISOPAR H as an electrolytic solution. ISOPAR H is known to be a non-polar hydrocarbon (more specifically, an isoparaffinic) liquid. See, for example, US 5,019,477, col. 6, lines 27-37. Hydrocarbon liquids are not electrolytic in the conventional meaning of the term. Thus, it is not clear what applicants mean by the term "electrolytic solution."

2) Table 1 discloses that the toners of Examples 20-30 and Comparative Examples 5 and 6 are made by Toner preparation methods 4 and 5. It is not clear which examples are made by which method. It is also not clear how the examples are made by both methods 4 and 5. Method 4 is not the same as method 5.

Appropriate correction is required.

Applicants' arguments filed in Paper No. 11 have been fully considered but they are not persuasive.

(1) Applicants argue that "a skilled artesian would readily understand the meaning of 'electrolytic solution.'"

As set forth in Paper No. 9, paragraph 4, the term "electrolytic" is defined as "pertaining to decomposition by an electric current." See Grant & Hackh's Chemical Dictionary (Grant), 5th ed., p. 205. An "electrolyte" is defined as a

substance that dissociates into two or more ions, to significant extent, in water. See Grant, p. 205. Solutions of electrolytes, "conduct an electric current, and can be decomposed by it (*electrolysis* [which is defined as the separation of ions of an electrolyte])." See Grant, 5th ed., p. 205. Accordingly, a person having ordinary skill in the art would understand that an electrolytic solution as according to Grant. However, on this basis, that person would not have known what applicants mean by an "electrolytic solution." As set forth in the objection, applicants are defining ISOPAR H, which is a non-polar hydrocarbon isoparaffinic liquid, as an "electrolytic solution." Even applicants' Exhibit 3, the Exxon Mobil Chemical website, attached to Paper No. 7 filed on Dec. 12, 2000, identifies ISOPAR H as a "hydrocarbon fluid." Applicants have not explained how a hydrocarbon compound, which only comprises C and H atoms, dissociates into ions in water. The extremely small conductivity of ISOPAR H cited by applicants proves the examiner's contention that ISOPAR H is not an electrolytic solution.

(2) Applicants again argue that the specification at page 25, lines 1-5, discloses that in "examples 1-8 and 20-30 and Comparative Examples 1, 2, 5, and 6, two methods for toner preparation are employed. However, the toner formulation and the

resin structure are common, so that the results on evaluation items are the same" (emphasis added).

Applicants' arguments are not persuasive. The disclosure at page 25 appears to be incorrect because the toner formulations in Toner preparation methods 4 and 5 are not the same, nor do they appear to have much in common. The formulations in the methods differ in the type of colorants and charge control agents used, and also in the amounts of the colorants, charge control agents, and binder resin used. Furthermore, the formulation of method 4 comprises aerosol silica and a wax, which are not used in the formulation of method 5. Compare specification, page 17, lines 16-29.

6. The instant specification, at page 16, lines 3-4, discloses that the intrinsic viscosity of the polyolefin resin having a cyclic structure is measured at 135°C for 1 g of resin uniformly dissolved in 100 ml of decalin.

The term "liquid dried system" recited in claim 33 is interpreted to refer to a liquid toner that comprises an "electrolytic solution" (which is represented by ISOPAR H, a known non-polar hydrocarbon liquid that is not an electrolytic solution - see paragraph 5, supra) and toner particles that are obtained by a dry polymerization method, which forms toner particles by interfacial polymerization. See instant

specification, Toner preparation method 4 at page 17. Applicants in Paper No. 7, page 9, lines 4-5, agree with the examiner's interpretation of the term "liquid dried system."

7. Claim 20 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, claim 20 has not been further treated on the merits.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 22-28, 33 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 is indefinite in the phrase "the polyolefin resin having a cyclic structure has a structure crosslinked by a diene monomer together with ester, amide, sulfide, ether, or an acyclic olefin and a cycloolefin and followed by reacting the system to obtain a terpolymeric polyolefin having a cyclic structure" (emphasis added) because it is not clear what system is being

reacted, e.g., the polyolefin having a cyclic structure with (1) a diene, a cycloolefin, and an ester, amide, sulfide, ether, or an acyclic olefin, or (2) the components without the polyolefin having the cyclic structure. Furthermore, it is not clear how the polyolefin's crosslinked structure is obtained by the formation of a terpolymeric polyolefin by reacting a diene monomer together with ester, amide, sulfide, ether or the acyclic olefin and the cycloolefin.

Claims 24, 26, and 28 are indefinite in the phrase "as claimed in any one of claim 16" (emphasis added) because there is only one claim 16.

Claim 28 is also indefinite because it is not clear whether the resins or resin fractions having three or more molecular weight ranges refer to the first and second resins or resin fractions recited in instant claim 16 further combined with a third resin or resin fraction having a Mn of 25,000 or more, or whether they refer to other resins or resin fractions.

Claims 33 and 34 are indefinite in the phrase "electrolytic solution" for the reasons given in paragraph 5, item 1, supra.

Applicants' arguments filed in Paper No. 11 with respect to the rejection of claim 22 have been fully considered but they are hot persuasive. Applicants argue that the skilled artesian would readily understand that "a terpolymer is formed by the reaction three monomers: a diene, the acyclic olefin and the cycloolefin."

However, claim 22 does not recite that the terpolymer is obtained by the reaction of a diene, an acyclic olefin, and a cycloolefin. Rather, claim 22 states that "the polyolefin resin having a cyclic structure has a structure crosslinked by a diene monomer together with ester, amide, sulfide, ether, or an acyclic olefin and a cycloolefin and followed by reacting the system to obtain a terpolymeric polyolefin having a cyclic structure." (emphasis added).

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 16-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) Claims 16 and 29 recite a second resin or resin fraction having an Mn of more than 7,500 has a Tg lower than 70°C. The originally filed specification does not provide an adequate

written description of such a second resin for the following reasons:

(a) The originally filed specification discloses a second resin having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity (i.v.) of 0.25 dl/g or more. See the originally filed specification at page 4, lines 21-27, and examples 2, 8, 10, 19, 21, and 30, and originally filed claim 1. The new claims limit the weight percent of the second resin to less than 50% by weight of the entire binder resin only if the second resin has an intrinsic viscosity and a Mw that meet certain minimum values. By necessary implication, the new claims permit the second resin to be present at more than 50% by weight of the entire binder resin whenever any of the two parameters intrinsic viscosity and Mw is less than the corresponding threshold value. Originally filed claim 1 and the originally filed specification require that the second resin comprise less than 50 % by weight of the entire binder resin and that the intrinsic viscosity, Mn, and Mw have certain minimum values. There is no original disclosure of the broader conditions on the second resin recited in claims 16-32.

(b) Contrary to applicants' comments Paper No. 11, page 16, lines 7-8, the originally filed specification at page 7, line 12, discloses that it is the first resin having a Mn of 7,500 or less that has a Tg of "preferably lower than 70°," not the second

resin having a Mn of 7,500 or more. Furthermore, the particular polyolefins having a cyclic structure in sample nos. 2 and 9 of the instant specification do not provide an adequate written description of the broader second resin having a Mn of 7,500 or more recited in claims 16 and 29. Sample nos. 2 and 9 exemplify particular polyolefin resins having a cyclic structure, which have particular Mw's, intrinsic viscosities, and HDT. The broader generic second resin having a Mn of 7,500 or more recited in claims 16 and 29 encompasses polyolefins outside the scope of sample nos. 2 and 9.

(2) Claim 17 recites "hybrid polymers." The originally filed specification does not provide an adequate written description of said hybrid polymers. The originally filed specification discloses "hybrid polymers of any of the mentioned polymers" at page 11, lines 22-25. The recited term "hybrid polymers" is broader than the disclosed hybrid polymers because it includes polymers comprising polymers not disclosed at page 11, lines 22-25, such as polycarbonates or polymers of vinyl chloride.

(3) Claim 17 also recites "mixtures" of the particular polymers recited in the Markush group, which includes "hybrid polymers." The originally filed specification does not provide an adequate written description of said mixtures. The originally filed specification discloses "a mixture or hybrid polymers of

any of the mentioned polymers" at page 11, lines 22-25. In other words, the specification only discloses mixtures of any of the mentioned polymers. The now recited term "mixtures" is broader than the disclosed mixtures because it includes mixtures comprising hybrid polymers.

(4) Claim 22 recites that the polyolefin resin having a cyclic structure of claim 16 has a crosslinked structure "by a diene monomer together with ester, amide, sulfide, ether, or an acyclic olefin and a cycloolefin and followed by reacting the system to obtain a terpolymeric polyolefin having a cyclic structure."

(a) The originally filed specification does not provide an adequate written description of a terpolymeric polyolefin having a cyclic structure obtained by the reaction of a diene monomer with ester, amide, sulfide, or ether. The originally filed specification at page 31, lines 3-10, discloses that a crosslinked structure may be introduced into the polyolefin resin having a cyclic structure by reacting "a diene monomer, such as norbornadiene or cyclohexadiene, together with an acyclic olefin monomer and a cycloolefin monomer, followed by reacting the system, thereby obtaining a terpolymeric polyolefin having a cyclic structure" (i.e., a terpolymer obtained from the diene, acyclic olefin, and cycloolefin monomers). Originally filed claim 7 recites that a polyolefin having a cyclic structure has a

"structure crosslinked by a diene, ester, amide, sulfide or ether." Thus, there is no disclosure in the originally filed specification for reacting a diene monomer with a cycloolefin monomer and either an ester, amide, sulfide, or ether to obtain a terpolymeric polyolefin having a cyclic structure with a crosslinked structure.

(b) The originally filed specification does not provide an adequate written description for a crosslinked structure in the polyolefin having a cyclic structure obtained by the reaction of a diene monomer with ester, amide, sulfide, or ether, and a cycloolefin monomer. As discussed in item (a) above, the originally filed specification at page 31, lines 3-10, only discloses forming a crosslinked structure by reacting a diene monomer with an acyclic olefin monomer and a cycloolefin monomer. Originally filed claim 7 recites a polyolefin having a cyclic structure. Said polyolefin is crosslinked by a diene, ester amide, sulfide or ether. Furthermore, the originally filed specification at page 13, lines 10-32, discloses that a polyolefin having a cyclic structure can be crosslinked by the addition of a crosslinking agent, oxidation, or epoxidation. The specification further discloses that a polyolefin having a cyclic structure that has a carboxyl group can be crosslinked by the addition of a metal. Thus, the originally filed specification does not disclose that the crosslinked structure is obtained by

reacting a diene monomer with an ester, amide, sulfide or ether, and a cycloolefin monomer as recited in claim 22.

(5) Claim 24 recites that the polar wax is a charge imparting agent. The originally filed specification does not provide an adequate written description of said polar wax. The originally filed specification at page 14, lines 1-4 discloses that the polar wax is a "function imparting agent" that enhances the offset preventing effect.

(6) Claims 33 and 34 recite that the binder resin comprises "a polyolefin resin having a cyclic structure." The originally filed specification does not provide an adequate written description of the broad recited polyolefin. The originally filed specification at page 4, lines 21-27, and originally filed claim 1 disclose only a polyolefin resin having a cyclic structure comprising a first resin having a Mn of 7,500 or less, and a second resin having a Mn of 7,500 or more, a Mw of 15,000 or more, and an intrinsic viscosity of 0.25 dl/g or more, where the second resin is present in an amount of less than 50% by weight based on the entire binder resin. There is no disclosure of the broader generic polyolefin recited in claims 33 and 34.

Applicants' arguments filed in Paper No. 11 with respect to the rejection of claim 22 have been fully considered but they are not persuasive.

Applicants argue that it is clear that "the skilled artesian, reading page 13 of the specification, would readily understand that one of the methods for introducing a crosslinked structure into the polyolefin resin having a cyclic structure is to add, *inter alia,* a diene . . . with the acyclic olefin and the cycloolefin."

However, instant claim 22 does not recite the original disclosure at page 13. Rather, claim 22 recites that the polyolefin resin having a cyclic structure of claim 16 has a crosslinked structure "by a diene monomer together with ester, amide, sulfide, ether, or an acyclic olefin and a cycloolefin and followed by reacting the system to obtain a terpolymeric polyolefin having a cyclic structure" (emphasis added). Claim 22 recites terpolymeric polyolefin resins obtained by reacting (1) a diene, an ester, and a cycloolefin, (2) a diene, an amide, and a cycloolefin, (3) a diene, a sulfide, and a cycloolefin, and (4) a diene, an ether, and a cycloolefin. Applicants have not indicated where in the originally filed specification there is antecedent basis for these terpolymeric polyolefins.

12. Claim 32 is objected to because of the following informalities: A comma is missing between the words "norbornene" and "tetracyclododecene."

Appropriate correction is required.

13. The term "electrolytic solution" recited in claims 13 and 14 appears to be disclosed by the instant specification to include hydrocarbon liquids, such as ISOPAR H. Thus, the rejections set forth in paragraph 15, infra, is made in view of the specification's definition of "electrolytic solution."

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f), or (g) prior art under 35 U.S.C. 103(a).

15. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/05529 (WO'529). See the PTO translation of WO'529 for cites.

WO'529 discloses a liquid toner that comprises 60 wt% of an "electrolytic solution," ISOPAR H, and 40 wt% of a mixture of solids comprising 1 part by weight of carbon black, 0.5 part by weight of a charge control agent, and 98.5 parts by weight of a binder resin. See the translation, Toner preparation method III at page 12, and Examples 18-27 in Table 2-2 at page 14. The above liquid toner meets the limitations of instant claim 34, except for the amount of binder resin, which must lie in the range of 85 to 95 wt%. However, WO'529 discloses that liquid toners can comprise 15 to 50 wt% of binder resin, 0-10 wt% of colorant, 0-5 wt% of a charge control agent, 0-10 wt% of a functioning agent, such as a wax, and 50 to 70 wt% of an electrolytic solution, based on the total weight of the liquid toner. Translation, Table 1 at page 3. Thus, the reference teaches that the mixture of solids can be present in an amount of 30 to 50 wt% based on the total weight of the liquid toner, where the binder resin is present in the mixture of solids in an amount of 50 to 100 wt%. The amount range of 50 to 100 wt% encompasses the range of 85 to 95 wt% recited in instant claim 34. Accordingly, the amount of binder resin is a result-effective variable, the variation of which is presumably within the skill of the ordinary worker in the art.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of WO'529, to vary the

amount of the binder resin, through routine experimentation, in the liquid toner disclosed by WO'529, such that the amount would be within the range of 85 to 95 wt% recited in instant claim 34, because that person would have had a reasonable expectation of successfully obtaining a liquid toner having the properties disclosed by WO'529. Translation, page 2, lines 8-13.

Applicants' arguments filed in Paper No. 11 with respect to have been fully considered but they are not persuasive.

Applicants argue that the binder resin recited the instant claims comprises "at least two portions of resin of lower (<7,500) or higher (>7,500) molecular weight."

However, instant claim 34 merely recites the presence of a binder resin comprising a polyolefin having a cyclic structure. Applicants cannot argue patentability based on limitations that are not present in the claims. WO'529 teaches a liquid toner that meets every limitation recited in claim 14, but for the amount of the binder resin. However, the amount of the binder resin appears to a result-effective variable, the variation of which is presumably within the skill of the ordinary worker in the art. Applicants have not shown that the amount of 95 wt% of binder resin is critical, and therefore unexpected.

Applicants argue that WO'529's toner has a narrow offset-free temperature, and is unable to achieve full fixing at higher

copying speeds compared to the present claimed toner. See Paper No. 11, page 11, lines 10-18.

Applicants' arguments are mere attorney arguments. There is no evidence on the present record that shows that the liquid toner recited in instant claim 34 provides unexpected results over the liquid toner disclosed by WO'529.

Applicants argue that WO'529 is not prior art under 35 U.S.C. 102(a) because the toners in WO'529 are not work of others, but are the work of the instant inventors Nakamura, Nishioka, Hoga, and Fukuzawa.

However, on the present record, the instant inventors of claim 34 include, in addition to Nakamura, Nishioka, Hoga, and Fukuzawa, Osan, Wehrmeister, Land, M. Arai, and S. Arai. There is no evidence on the present record to support applicants' allegation that the liquid toner disclosed in WO'529 is not the work of others. Accordingly, WO'529 is a reference under 35 U.S.C. 102(a), and the rejection over WO'529 stands.

16. The references cited in the Search Report PCT have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing,

preferably on a PTO-1449 form or PTO/SB/08A form, must be filed within the set period for reply to this Office action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (703) 308-3625. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311 (Rightfax) for after final faxes, and (703) 872-9310 for other official faxes.

Any inquiry of papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Alva Catlett, whose telephone number is (703) 308-1100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JLD
March 22, 2002

Janis L. Dote
JANIS L. DOTE
PRIMARY EXAMINER
GROUP ~~1500~~ 1700